

X22C BEAMLINE SAFETY CHECKLIST

14 October 1999

- [] X22C-1. Do not unseal beamline isolation valve (Valve 1C) unless front end ion gauge reads less than 2×10^{-9} Torr. Reclose valve if pressure exceeds 5×10^{-9} for more than 10 seconds.
- [] X22C-2. Valid padlock checklist. Validation date: _____
- [] X22C-3. Page 2 of this checklist is present.
- [] X22C-4. Exclusion Zone 1 between Isolation Valve and Bremsstrahlung Shield 1 (BS-1). See Photograph A.
- [] X22C-5. Bremsstrahlung Shield 1 (BS-1). Banded. See Photograph B.
- [] X22C-6. Exclusion Zone 2 downstream of Bremsstrahlung Shield 1 (BS-1). See Photograph B.
- [] X22C-7. Lead Shield on Bellows downstream of Bremsstrahlung Shield 1 (BS-1). See Photograph B.
- [] X22C-8. Lead Shield on Bellows upstream of Bremsstrahlung Shield 2 (BS-2). See Photograph C.
- [] X22C-9. Bremsstrahlung Shield 2 (BS-2). Banded. See Photograph C.
- [] X22C-10. Lead Shield on Bellows downstream of Bremsstrahlung Shield 2 (BS-2). See Photograph C.
- [] X22C-11. Exclusion Zone 3 upstream of Bremsstrahlung Shield 3 (BS-3). See Photograph G.
- [] X22C-12. Bremsstrahlung Shield 3 (BS-3). Banded. See Photograph G.
- [] X22C-13. Lead Shield on Be Window 1C downstream of Bremsstrahlung Shield 3 (BS-3). See Photograph G.
- [] X22C-14. Lead Shield on Bellows downstream of Bremsstrahlung Shield 3 (BS-3). See Photograph G.
- [] X22C-15. Lead Shield on Bellows upstream of Bremsstrahlung Shield 5 (BS-5). See Photograph H.
- [] X22C-16. Exclusion Zone 4 upstream of Bremsstrahlung Shield 5 (BS-5). See Photograph H.
- [] X22C-17. Bremsstrahlung Shield 5 (BS-5). Banded. See Photograph H.
- [] X22C-18. Lead Shield on Bellows downstream of Bremsstrahlung Shield 5 (BS-5). See Photograph I.
- [] X22C-19. Bremsstrahlung Shield 6 (BS-6). Banded. See Photograph I.
- [] X22C-20. Exclusion Zone 5 downstream of Bremsstrahlung Shield 6 (BS-6). See Photograph I.

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- [] X22C-21a Lead Shield on 4way Cross. Lead Skirt and Lead Glass on Viewport under Cross. See Photograph J1.
- [] X22C-21b Bremsstrahlung Shield 7 (BS-7). Banded. See Photograph J2.
- [] X22C-22. Lead Shield on Be Window 2C upstream of Monochrometer Tank.
- [] X22C-23. Lead Shield Skirt and Lead Plexiglas on Viewport on Monochrometer Tank.
- [] X22C-24. Monochrometer Tank pressure < 2×10^{-6} Torr. Pressure indicated on ion pump controller.
- [] X22C-25. Exclusion Zone 6 upstream of Bremsstrahlung Shield 7 (BS-7). See Photograph K.
- [] X22C-26. Bremsstrahlung Shield 8 (BS-8). Banded. See Photograph K.
- [] X22C-27. Exclusion Zone 7 downstream of Bremsstrahlung Shield 8 (BS-8). See Photograph K.
- [] X22C-28. Lead Shield on Bellows downstream of Bremsstrahlung Shield 7 (BS-7).
- [] X22C-29. Lead Plexiglas window where beam tube enters the hutch is in place.
- [] X22C-30. Bremsstrahlung Shield 9 (BS-9) outside of back of hutch. Banded. See Photograph L.

CHECKS COMPLETED BY: _____ DATE: _____